

### **Amendments to the Claims**

Please amend the claims to read as follows:

1-80. (Canceled)

81. (New) An aquaculturally-raised aquatic animal made by cultivating an aquatic animal with a feed, wherein at least 1% by weight of the fat content of the feed is omega-3 long chain polyunsaturated fatty acid (O3-LC-PUFA) derived from a non-animal source.

82. (New) The animal of claim 81, wherein the O3-LC-PUFA comprises at least one of docosahexaenoic acid (DHA), eicosapentaenoic acid (EPA), and arachidonic acid (ARA).

83. (New) The animal of claim 81, wherein the O3-LC-PUFA comprises DHA.

84. (New) The animal of claim 81, wherein from 1% to 50% by weight of the fat content of the feed is DHA.

85. (New) The animal of claim 81, wherein the feed comprises less than 5% animal material.

86. (New) The animal of claim 81, wherein the feed is substantially free of animal material.

87. (New) The animal of claim 81, wherein the feed meets the organic certification requirements of the 2002 United States Department of Agriculture National Organic Program Standards (USDA NOPS).

88. (New) The animal of claim 81, wherein the animal meets the organic certification requirements of the 2002 USDA NOPS.

89. (New) The animal of claim 81, wherein the O3-LC-PUFA is derived from microalgae.

90. (New) The animal of claim 89, wherein the microalgae are selected from the group consisting of *Crypthecodinium*, *Schizochytrium*, *Thraustochytrium*, *Pavlova*, *Tetraselmis*, and *Isochrysis* species, and combinations of these.

91. (New) The animal of claim 81, comprising at least 12 grams of DHA per kilogram of animal.

92. (New) The animal of claim 81, being a crustacean.

93. (New) The animal of claim 81, being a shrimp.

94. (New) The shrimp of claim 93, comprising more than 3 milligrams DHA per gram dry weight of shrimp.

95. (New) The animal of claim 81, being a fish.

96. (New) The fish of claim 95, wherein more than about 5% of the total extractable fat of the fish is DHA.

97. (New) The animal of claim 81, being a catfish.

98. (New) The animal of claim 81, being a mollusk.

99. (New) The mollusk of claim 98, wherein more than about 10% of the total extractable fat of the mollusk is DHA.

100. (New) The mollusk of claim 98, being an abalone.

101. (New) The animal of claim 81, wherein the feed comprises at least one carotenoid derived from a non-animal source.

102. (New) The animal of claim 101, wherein the carotenoid is selected from the group consisting of lutein, zeaxanthin, and lycopene.

103. (New) The animal of claim 102, comprising at least about 60 milligrams lutein per kilogram of animal.

104. (New) The animal of claim 102, comprising at least about 60 milligrams zeaxanthin per kilogram of animal.

105. (New) The animal of claim 101, wherein less than about 50% of the total carotenoid content of the animal is astaxanthin.

106. (New) The animal of claim 101, wherein the source is selected from the group consisting of marigold petals, Lycium Chinese Mill Berries, tomatoes, microalgae, diatoms, and bacteria.

107. (New) The animal of claim 101, wherein the feed further comprises a phospholipid in an amount sufficient to enhance the bioavailability of the carotenoid.

108. (New) The animal of claim 107, wherein the phospholipid is a phospholipid extracted from a marine algae.

109. (New) The animal of claim 81, wherein the feed further comprises a taurine-containing material.

110. (New) The animal of claim 109, wherein the feed comprises at least 10 milligrams taurine per kilogram.

111. (New) The animal of claim 81, wherein the animal has been cultivated with the feed for at least two weeks prior to harvest.

112. (New) A method of aquaculturally-raising an aquatic animal, the method comprising cultivating the animal with a feed, wherein at least 1% by weight of the fat content of the feed is omega-3 long chain polyunsaturated fatty acid (O3-LC-PUFA) derived from a non-animal source.

113. (New) In a method of aquaculturally-raising an aquatic animal, the improvement comprising cultivating the animal with a feed, wherein at least 1% by weight of the fat content of the feed is omega-3 long chain polyunsaturated fatty acid (O3-LC-PUFA) derived from a non-animal source.

114. (New) A feed for cultivating aquaculturally-raised aquatic animals, the feed comprising a fat component, wherein at least 1% by weight of the fat content of the feed is omega-3 long chain polyunsaturated fatty acid (O3-LC-PUFA) derived from a non-animal source.